

AMENDMENTS TO THE CLAIMS

1. (Canceled)
2. (Previously presented) A method as recited in Claim 21, wherein sending information comprises subscribing the router to all the events that are in the mapping and associated with the router at an event gateway that is coupled to the event bus.
3. (Previously presented) A method as recited in Claim 21, further comprising the steps of receiving application-specific mapping information from an application program and updating the mapping using the application-specific mapping information.
4. (Original) A method as recited in Claim 2, further comprising the steps of receiving application-specific mapping information from an application program in XML format using a data access component that transforms the application-specific mapping information from XML format into a canonical object model format.
5. (Canceled)
6. (Previously presented) A method as recited in Claim 21, wherein sending information comprises generating, based on the mapping, a list of all the events that are in the mapping and associated with the router, and sending the list to an event gateway that is coupled to the event bus.
7. (Previously presented) A method as recited in Claim 21, wherein the mapping comprises an association of stored values that identify for each of the routers, an application, a group identifier, an event of the one or more events, a network device identifier, one or more published events, and one or more subscribed events.

8.-17. (Canceled)

18. (Currently amended) A method as recited in Claim 21, wherein receiving the ~~device~~ router identifier comprises receiving a publish request that includes a router identifier for one of the ~~network devices~~ routers in the logical group or a group identifier of the logical group, and ~~an~~ the event identifier.
19. (Currently amended) A method as recited in Claim 18, wherein sending information comprises looking up the router identifier, or the group identifier, and the event identifier in the mapping and receiving ~~a~~ the subject list in response thereto.
20. (Currently Amended) A method as recited in Claim 18, wherein sending information comprises looking up the router identifier, or the group identifier, and the event identifier in the mapping, receiving ~~a~~ the subject list in response thereto, and applying the subject list to the router at the event gateway.
21. (Currently amended) A method of automatically subscribing a router in a network to a plurality of events applicable to a logical group of which the router is a member, comprising the computer-implemented steps of:
creating and storing a mapping that associates a plurality of routers with the logical group
and that associates the logical group with one or more events that can pass over an event bus to which the router communicates;
receiving ~~a~~ an event subscribe request from the router that includes a router identifier that uniquely identifies the router and an event identifier;
in response to receiving the event subscribe request:
looking up the router identifier and the event identifier in the mapping;
receiving ~~a~~ an event subject list in response thereto, wherein the subject list identifies all subjects that are available using the event bus and to which the router should subscribe;

sending information to the event bus that requests the event bus to subscribe the router to all events in the subject list.

22. (Currently amended) A computer-readable medium carrying one or more sequences of instructions for automatically subscribing a router of a packet-switched network to a plurality of events applicable to a logical group of which the router is a member, which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of:
- creating and storing a mapping that associates a plurality of routers with the logical group and that associates the logical group with one or more events that can pass over an event bus to which the router is logically coupled;
- receiving an event subscribe request from the router that includes a device-router identifier of one of the routers in the logical group that uniquely identifies the router and an event identifier;
- ~~receiving an event that is among the one or more events that are in the mapping;~~
- ~~based on the mapping, sending information to the router that causes the router to receive all events that are associated in the mapping with the logical group in which the router participates~~
- in response to receiving the event subscribe request;
- looking up the router identifier and the event identifier in the mapping;
- receiving an event subject list in response thereto, wherein the subject list identifies all subjects that are available using the event bus and to which the router should subscribe;
- sending information to the event bus that requests the event bus to subscribe the router to all events in the subject list.
23. (Currently amended) An apparatus for automatically subscribing a router of a packet-switched network to a plurality of events applicable to a logical group of which the router is a member, comprising:

means for creating and storing a mapping that associates a plurality of routers with the logical group and that associates the logical group with one or more events that can pass over an event bus to which the router is logically coupled;

means for receiving an event subscribe request from the router that includes a device router identifier of one of the routers in the logical group that uniquely identifies the router and an event identifier;

~~means for receiving an event that is among the one or more events that are in the mapping;~~

~~means for, based on the mapping, sending information to the router that causes the router to receive all events that are associated in the mapping with the logical group in which the router participates~~

means for looking up the router identifier and the event identifier in the mapping in response to receiving the event subscribe request;

means for receiving an event subject list in response thereto, wherein the subject list identifies all subjects that are available using the event bus and to which the router should subscribe;

means for sending information to the event bus that requests the event bus to subscribe the router to all events in the subject list.

24. (Currently amended) An apparatus for automatically subscribing a router to a plurality of events applicable to a logical group of which the router is a member, comprising:
a network interface that is coupled to the data network for receiving one or more packet flows therefrom;
a processor;
one or more stored sequences of instructions which, when executed by the processor, cause the processor to carry out the steps of:
creating and storing a mapping that associates a plurality of routers with the logical group and that associates the logical group with one or more events that can pass over an event bus to which the router is logically coupled;

receiving an event subscribe request from the router that includes a device-router identifier of one of the routers in the logical group that uniquely identifies the router and an event identifier;
~~receiving an event that is among the one or more events that are in the mapping;~~
~~based on the mapping, sending information to the router that causes the router to receive all events that are associated in the mapping with the logical group in which the router participates~~
in response to receiving the event subscribe request:
looking up the router identifier and the event identifier in the mapping;
receiving an event subject list in response thereto, wherein the subject list identifies all subjects that are available using the event bus and to which the router should subscribe;
sending information to the event bus that requests the event bus to subscribe the router to all events in the subject list.

25. (Currently amended) The computer-readable medium recited in Claim 22, wherein ~~sending information to the router that causes the router to receive all events~~ comprises the steps of subscribing the router to all the events that are in the mapping and associated with the router at an event gateway that is coupled to the event bus.
26. (Previously presented) The computer-readable medium recited in Claim 22, wherein the method further comprises the steps of receiving application-specific mapping information from an application program and updating the mapping using the application-specific mapping information.
27. (Previously presented) The computer-readable medium recited in Claim 25, wherein the method further comprises the steps of receiving application-specific mapping information from an application program in XML format using a data access component that transforms the application-specific mapping information from XML format into a canonical object model format.

28. (Canceled)
29. (Currently amended) The computer-readable medium recited in Claim 22, wherein sending information ~~to the router that causes the router to receive all events~~ comprises the steps of generating, based on the mapping, a list of all the events that are in the mapping and associated with the router, and sending the list to an event gateway that is coupled to the event bus.
30. (Currently amended) The ~~method~~ computer-readable medium recited in Claim 22, wherein the mapping comprises an association of stored values that identify for each router, an application, a group identifier, ~~an~~ the ~~event of the one or more events~~ identifier, a network device identifier, one or more published events, and one or more subscribed events.
- 31.-40. (Canceled)
41. (Currently amended) The computer-readable medium recited in Claim 22, wherein receiving the ~~device~~ router identifier comprises receiving a publish request that includes a router identifier for one of the routers in the logical group or a group identifier of the logical group, and an event identifier.
42. (Canceled)
43. (Currently amended) The computer-readable medium recited in Claim 41, wherein sending information ~~to the router that causes the router to receive all events that are associated in the mapping with the logical group in which the router participates~~ ordering comprises looking up the router identifier, or the group identifier, and the event identifier in the mapping, receiving a subject list in response thereto, and applying the subject list to the router at the event gateway.

44. (Previously presented) The apparatus recited in Claim 24, wherein sending information to the router that causes the router to receive all events comprises the steps of subscribing the router to all the events that are in the mapping and associated with the router at an event gateway that is coupled to the event bus.
45. (Previously presented) The apparatus recited in Claim 24, wherein the method further comprises the steps of receiving application-specific mapping information from an application program and updating the mapping using the application-specific mapping information.
46. (Previously presented) The apparatus recited in Claim 44, wherein the method further comprises the steps of receiving application-specific mapping information from an application program in XML format using a data access component that transforms the application-specific mapping information from XML format into a canonical object model format.
47. (Canceled)
48. (Currently amended) The apparatus recited in Claim 24, wherein sending information to ~~the router that causes the router to receive all events~~ comprises the steps of generating, based on the mapping, a list of all the events that are in the mapping and associated with the router, and sending the list to an event gateway that is coupled to the event bus.
49. (Currently amended) The apparatus recited in Claim 24, wherein the mapping comprises an association of stored values that identify for each router, an application, a group identifier, an event of the one or more events, a router identifier, one or more published events, and one or more subscribed events.
- 50.-59. (Canceled)

60. (Previously presented) The apparatus recited in Claim 24, wherein receiving the router identifier comprises receiving a publish request that includes a router identifier for one of the routers in the logical group or a group identifier of the logical group, and an event identifier.
61. (Canceled)
62. (Currently amended) The apparatus recited in Claim 60, wherein sending information to the router ~~that causes the router to receive all events that are associated in the mapping with the logical group in which the router participates~~ ordering comprises looking up the router identifier, or the group identifier, and the event identifier in the mapping, receiving a subject list in response thereto, and applying the subject list to the router at the event gateway.
63. (Canceled)
64. (Canceled)